

## ***2008 Kentucky NEED Youth Award for Energy Achievement Project Summaries***

- **372 Students Facilitated Projects**
- **21,367 Students Reached through projects**
- **405,600 Community members reached**

### **District Level**

1. **Kenton County School District** created an energy saving program called Energy WISE (Wisdom Is Saving Energy). The program is designed to educate building occupants and the community about energy efficiency while reducing energy consumption in their schools. Student energy teams were formed in each of the eighteen schools. Students patrolled their schools, monitoring energy usage in the classrooms, hosting energy assemblies, creating posters and announcements about energy saving opportunities. As a result of the Energy WISE teams, the Kenton County School District has reduced energy consumption; enable them to redirect those funds for education. **NATIONAL WINNER: DISTRICT OF THE YEAR**

### **High School Level**

2. **Campbell County High School's** freshman academy of 450 students studied energy consumption in the district's schools and in homes in their county. To do this they divided into three groups, with each taking a different energy conservation focus. One group conducted school energy audits, a second group conducted home energy audits and the third group studied energy strategies for future school facilities. At the same time the math, science, English and social studies teachers incorporated the projects into their curriculum; using them as a vehicle to teach core content such as the science of energy, data collection, persuasive writing and global economics to the students.
3. **Russell Area Technology Center** students studied alternative and renewable energy using the NEED Science of Energy kit. They have a three-year plan of action that focuses on a different renewable energy each year. Last year's focus was wind and general awareness of energy conservation and resources. They studied fossil fuels and current energy resources. Then they created posters of these resources and presented a PowerPoint presentation about them to other classes. Finally, they built a live action full scale 1 KW wind turbine that operates in as little as 4.5 mph winds. They also had bench top windmill models which they used as a demonstration to create electricity. Next year they plan to study solar energy. **STATE LEVEL: SENIOR WINNER**
4. **Somerset High School's** energy team educated K-12 students about energy concepts and energy conservation in the district's three schools. They served as

Energy Star pledge drivers for the Change a Light, Change the World campaign. During Change a Light activities they distributed over 1,000 CFL bulbs, collected pledges from people who promised to change over 2,500 incandescent bulbs to CFLs which will lead to an energy savings of over \$67,000 and a reduction of 1,000,000 pounds of greenhouse gasses being emitted.

**NATIONAL LEVEL: SENIOR ROOKIE OF THE YEAR WINNER**

### **Middle School Level**

5. **Phillip Sharp Middle School's** energy team did an energy audit of their school. Their goal was to reduce energy consumption. One strategy implemented was to get their school to turn off computer monitors when not in use. They also participated in the Change a Light, Change the World campaign, saving 244,494 kWh of electricity and preventing 354,603 pounds of greenhouse gases from being emitted. They also implemented a recycling program.

**STATE LEVEL: JUNIOR WINNER**

6. **Twenhofel Middle School's** energy team gave tours of the energy efficient features of their school, including the solar panels, geothermal heating and cooling, natural daylighting and rainwater harvesting system. They conducted secret energy audits of the school classrooms each month and measured the appliances that are using electricity in each classroom. They notified the classes of their findings; held an energy awareness assembly explaining the difference between an incandescent bulb and a CFL and started a recycling program.
7. **West Hardin Middle School** students taught their school and their community about the energy efficiency of compact fluorescent light bulbs, which included producing radio announcements, working with their electric coop to get free CFLs that they gave away at school volleyball games and a school-wide Change a Light pledge drive. They also monitored school buses for idle time, charted data and submitted their findings to the superintendent and director of transportation.

### **Elementary Level**

8. **Beechgrove Elementary School's** student NEED team learned about energy; how their school uses energy and ways they can conserve energy. This involved planning and hosting several events to educate the students, staff and families. They conducted an energy audit of their school, created and taught energy lessons and wrote a report about their energy activities for the year.
9. **Caywood Elementary:** Educated their students, staff and community on ways to conserve energy and informed them about the Change a Light Change the World campaign. They created posters, wrote a speech, and even wrote and choreographed a song about CFL bulbs. They performed their song before the district school board and representatives from their local utility. They also collected lighting data, using light meters from the NEED energy efficiency kit. They recorded the data and sent it to the engineers designing the lighting for the district's new middle school building.

**STATE LEVEL: ELEMENTARY WINNER**

10. **Fort Wright Elementary:** Conducted an energy awareness campaign for their local community and school. They wanted to inform them about responsible energy usage and the efficiency of CFL bulbs. Their work with the community received recognition by their school district, city and state leaders. They demonstrated NEED experiments for K-3 students, researched and wrote a brochure containing energy saving tips; created an energy bulletin board for Earth Day and encouraged all the classes to use the ideas from the board to complete a service learning project.
11. **Picadome Elementary** students taught their school about conservation this year. They met each week to learn about energy and study energy sources. Then they planned energy projects for their school's first energy science day. During the year they also studied recycling and planted a butterfly garden. At the end of the school year they will hold an energy house competition. Each class will design a box and insulate it. Then they will place an ice cube in each "house" and see which ice cube takes the longest to melt in the hot sun.
12. **River Ridge Elementary:** Their goal was to educate people about energy conservation. Their activities included a school patrol to see how much energy classes were using and wasting. They organized a school assembly to tell everyone about their energy club and performed "Energilocks" to teach about conservation. They set up a booth to sell CFL light bulbs at a high school basketball game and created a poster highlighting ways to save energy. They also adopted another elementary school, with the goal of helping them to start an energy team of their own. They have loaned them their energy efficiency materials and are serving as advisors to the potential energy club.
13. **White's Tower Elementary's** energy team goal was to give energy awareness to their peers, school and community. They went to a local drug store and taught about CFLs and gave away CFLs at Family Literacy Night. They also conducted monthly energy audits of their school and did a plug load study of their school's appliances. They planned "Go Green week" for their school: dedicated to energy conservation and celebrating all that the energy team and school has accomplished this year in energy savings.